

IN THE CLAIMS:

Please cancel claims 36, 51-54 and 56-68 without prejudice and amend claims 35, 37-50 and 55 as follows:

35. (currently amended) Electric machine with a rotor ~~(3, 53)~~ and a stator ~~(7, 57)~~, in which electric coils ~~(6, 56)~~ and permanent magnets ~~(5)~~ are ~~located~~ disposed which influence each other when the rotor revolves, ~~where the rotor (3, 53) contains the wherein~~ said permanent magnets (5) are cylindrical and are disposed tangentially on a circumference of said rotor, and the stator contains the coils (6, 56) and the said electric coils (6, 56) do not have an iron core and at least one section of the said electric coils extends transversely across the said circumference of the said rotor, wherein the said electric coils (6, 56) are fitted in the said stator (7, 57) individually and are bent in such a way so that they extend on both axial sides of the said rotor (3, 53) and enclose the surround said permanent magnets (5) located in the said rotor to a large extent.

36. (cancelled)

37. (currently amended) Electric machine according to claim 35, wherein ~~the said~~ permanent magnets ~~(5)~~ are ~~attached~~ coupled to ~~the said~~ rotor ~~(3)~~ via support elements ~~(4)~~.

38. (currently amended) Electric machine according to claim 35, wherein ~~the~~ said electric coils ~~(6)~~ have a Ω -shaped cross-section and ~~the~~ said permanent magnets ~~(5)~~ are immediately next to ~~the an~~ inside of the said electric coils.

39. (currently amended) Electric machine according to claim 35, wherein ~~the~~ support elements ~~(4)~~ for ~~the~~ said permanent magnets ~~(5)~~ are attached to ~~the~~ said rotor ~~(3)~~ in such a way that they can be replaced.

40. (currently amended) Electric machine according to claim 35, wherein further comprising an interlocking facility ~~(73)~~ is provided between ~~the~~ said permanent magnets ~~(5)~~ and/or and their support elements ~~(4)~~ and ~~the~~ said rotor ~~(3)~~, preferably in the a radial direction.

41. (currently amended) Electric machine according to claim 35, wherein ~~the~~ said permanent magnets ~~(5)~~ and/or and their support elements ~~(4)~~ are attached to ~~the~~ said rotor ~~(3)~~ so that they can be removed in ~~the an~~ axial direction.

42. (currently amended) Electric machine according to claim 35, wherein ~~the~~ further comprising connections ~~(8)~~ for ~~the~~ said

coils ~~(5, 56)~~ are located disposed so that they are accessible individually on the said stator ~~(7, 57)~~.

43. (currently amended) Electric machine according to claim 35, wherein the said permanent magnets (5) located are arranged so that successive permanent magnets behind each other have different polarities ~~polarity in each case.~~

44. (currently amended) Electric machine according to claim 35, wherein further comprising a pole reversal device ~~is provided disposed~~ in the a supply line to the said electric coils ~~(6, 56)~~.

45. (currently amended) Electric machine according to claim 35, wherein the said coil ~~(6, 56)~~ is annular and profiles of the said rotor ~~(3, 5, 53)~~ and the said coil are adapted to each other.

46. (currently amended) Electric machine according to claim 35, wherein several rotors ~~(3, 53)~~ and coil configurations are located behind each other in the an axial direction of the machine.

47. (currently amended) Electric machine according to claim 35, wherein at least two machines preferably in the form of motors with different diameters are located behind each other on a mutual machine shaft ~~(2, 52)~~.

48. (currently amended) Electric machine according to claim 35, wherein ~~the~~ said coils ~~(6)~~ are formed from several coils that are only one wire layer thick ~~in each case~~.

49. (currently amended) Electric machine according to claim 48, wherein ~~the~~ connections for the individual coils are wired individually and are ~~in particular~~ designed ~~so that they can~~ to be connected in series ~~and/or~~ and parallel.

50. (currently amended) Electric machine according to claim 48, wherein ~~the~~ said individual coil layers are ~~in particular~~ glued together with an adhesive that conducts heat effectively.

51. (cancelled)

52. (cancelled)

53. (cancelled)

54. (cancelled)

55. (currently amended) Electric machine according to claim 35, wherein further comprising a cable support ~~(10)~~ ~~is provided~~ on ~~the~~ a circumference of the rotor - stator assembly.

- 56. (cancelled)
- 57. (cancelled)
- 58. (cancelled)
- 59. (cancelled)
- 60. (cancelled)
- 61. (cancelled)
- 62. (cancelled)
- 63. (cancelled)
- 64. (cancelled)
- 65. (cancelled)
- 66. (cancelled)
- 67. (cancelled)
- 68. (cancelled)